

Ice Storm Impacts:

Small Kansas Town Loses More Than Just Electricity

*By Zachary W. Phillips, Environmental Scientist
South Central District Office*

On the evening of Jan. 4, thousands of south central Kansans were affected when an ice storm caused massive power outages across the region. Most municipalities have contingency or emergency plans and equipment in place to deal with such events, however Garden Plain was one town in particular that was severely affected. During the ice storm, the city not only lost electrical power to all of their public water supply groundwater wells, but also lost power to their wastewater treatment facility.

On Jan. 5, Garden Plain city staff notified KDHE-South Central District Office (SCDO) regarding the effects of the ice storm. Although Gov. Sebelius cancelled work for non-essential state employees for Jan. 5, SCDO staff knew that the damage from the ice storm had affected many public water supply systems and wastewater treatment facilities. SCDO staff, from their homes, began contacting major public water and wastewater systems to determine the extent of the damage. SCDO staff also came into the office that day to answer the many phone calls regarding the storm.



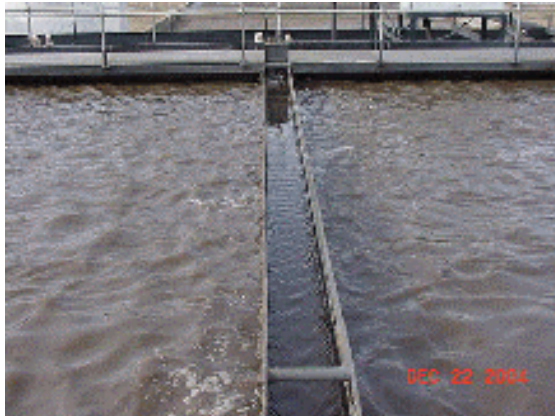
The extent of the ice storm was so severe that SCDO employees were delayed from reporting to work until 10 a.m. on Jan. 6. SCDO staff, however, knew that Garden Plain residents were facing major difficulties. By 9 a.m. that day, KDHE staff were at the city of Garden Plain to assist city staff in identifying and resolving threats to public health.

Unfortunately, the city's emergency electrical generators for both the public water supply system and the wastewater treatment facility were not

functioning properly. In an effort to conserve water in the elevated water tower and maintain adequate pressure in the public water supply distribution system, the city issued a water rationing notice, but eventually consumed all of the available potable water. The city eventually located an electrical generator for the groundwater wells, and water pressure was restored to the distribution system. SCDO staff advised the city to issue a boil water notice because of the total loss of water pressure. Garden Plain finally rescinded the boil water notice on Jan. 14, after tests confirmed the water was safe.

- Continued -

Compared to Garden Plain's public water supply problems, the wastewater treatment facility presented an even more challenging situation. Electrical power crews were able



to restore electrical power to the wastewater treatment facility on Jan. 6, however the electrical power outage had damaged critical electrical components needed to properly operate the wastewater treatment facility. Once all of the electrical components were repaired, Garden Plain city staff were faced with the challenge of trying to restore the wastewater treatment operation. SCDO staff provided advice to Garden Plain staff regarding operation of the aeration basins, wastewater clarifiers, chlorination system, and sludge

storage facility. With the assistance of SCDO staff, the Kansas Rural Water Association, city of Wichita wastewater staff, and various equipment representatives, the Garden Plain wastewater staff were able to make significant repairs to the system in a minimal amount of time.

SCDO staff continues to work with Garden Plain wastewater staff and city officials. Garden Plain wastewater staff have instituted a preventative maintenance program that should prevent similar situations in the future. Although the effects of Mother Nature can't be foreseen, cities in Kansas should always prepare for the worst, by emergency planning and maintaining emergency equipment.

